

CLAIMS:

1. An apparatus for compressing video signals for transmission, comprising:
means (102) for generating a content controlled summary from input video data;
means (106) for synchronizing the content control summary with a continuous
5 audio signal;
means (108) for encoding the summary along with the continuous audio for transmission.
2. The apparatus according to claim 1, further comprising:
10 means (1016) for transmitting the encoded signal.
3. The apparatus according to claim 1, wherein the content-controlled summary is created using key-frame detection.
- 15 4. The apparatus according to claim 1, wherein the content controlled summary means is controlled by a bit-rate control loop.
5. The apparatus according to claim 1, wherein the content control summary and the continuous audio signal are compressed into a substantially constant bit-rate stream.
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6. The apparatus according to claim 1, wherein time-stamps are inserted into the synchronized signal to ensure proper decoding.
7. A method for compressing video signals for transmission, comprising the steps
25 of:
generating a content controlled summary from input video data;
synchronizing the content control summary with continuous audio signal;
encoding the summary along with the continuous audio for transmission.

8. A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 7.
9. An interactive communication system for supplying information requested by a user, comprising:
- 5 means (1004) for receiving an information request from the user;
means (806) for searching a database for the requested information and extracting the requested information from the database;
means (1010) for generating a content controlled summary of the extracted information;
10 means (1012) for synchronizing the content control summary with continuous audio signal;
means (1014) for encoding the summary along with the continuous audio for transmission.
- 15 10. A method for supplying information requested by a user in an interactive communication system, comprising the steps of:
receiving an information request from the user;
searching a database for the requested information and extracting the requested information from the database;
20 generating a content controlled summary of the extracted information;
synchronizing the content control summary with continuous audio signal;
encoding the summary along with the continuous audio for transmission.
11. A bitstream for carrying audio/video information in a communication system,
25 comprising:
an audio stream (403);
a content video summary stream (405) created from key-frames of an input video signal, wherein said audio stream is synchronized with the video summary stream for broadcast.
- 30 12. A storage medium comprising:
an audio stream (403);

a content video summary stream (405) created from key-frames of an input video signal, wherein said audio stream is synchronized with the video summary stream for broadcast.

- 5 13. A decoder for decoding a received information stream, comprising:
 means (902) for decoding a base stream in said information stream;
 means (904) for up-converting the decoded base stream;
 means (908) for decoding an enhancement stream in said information stream;
10 means (906) for combining the upconverted base stream and the enhancement
stream, wherein the combined signal has still video images which are synchronized with an
audio stream.
14. A method of decoding a received information stream, comprising:
 decoding (902) a base stream in said information stream;
15 up-converting (904) the decoded base stream;
 decoding (908) an enhancement stream in said information stream;
 combining (906) the upconverted base stream and the enhancement stream,
wherein the combined signal has still video images which are synchronized with an audio
stream.
- 20 15. A method of decoding a bitstream, the bitstream carrying an audio stream and a
content video summary stream created from key-frames of an input video signal, wherein
said audio stream is synchronized with the video summary stream, wherein the method
comprises:
25 decoding the audio stream,
 decoding the video summary stream, and
 reproducing the decoded audio stream and the decoded video summary stream
in a synchronized fashion as indicated by the bitstream.
- 30 16. A device for decoding a bitstream, the bitstream carrying an audio stream and a
content video summary stream created from key-frames of an input video signal, wherein
said audio stream is synchronized with the video summary stream, wherein the decoder
comprises:
 means for decoding the audio stream,

means for decoding the video summary stream, and
means for reproducing the decoded audio stream and the decoded video
summary stream in a synchronized fashion as indicated by the bitstream.